A New *Anthurium* sect. *Pachyneurium* (Araceae) from Minas Gerais State, Brazil

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ABSTRACT. A new species, *Anthurium leonii* E. G. Gonçalves from Minas Gerais State in southeastern Brazil, is described, illustrated, and compared with *A. solitarium* Schott, the most similar species. *Anthurium leonii* belongs to section *Pachyneurium* Schott series *Pachyneurium* (Schott) Croat and seems to occur only above 1100 m elevation in the Caparaó National Park. This new species is so far known from the type locality and surrounding areas.

RESUMO. Uma nova espécie de *Anthurium* (*A. leonii* E. G. Gonçalves), proveniente do estado de Minas Gerais, sudeste do Brasil, é descrita, ilustrada e comparada com *A. solitarium* Schott, a espécie mais similar. *Anthurium leonii* pertence à seção *Pachyneurium* Schott, série *Pachyneurium* (Schott) Croat e parece apenas ocorrer em altitudes acima de 1100 m, no Parque Nacional do Caparaó. Até onde se conhece, esta espécie é apenas conhecida para a localidade típica e áreas vizinhas.

Key words: *Anthurium*, Araceae, Brazil, section *Pachyneurium*.

The genus *Anthurium* Schott, comprising approximately 1000 species (Croat, 1999), is exclusively Neotropical and is the largest genus in the family Araceae. Section *Pachyneurium* is the only section completely revised in recent times (Croat, 1991), with at least 115 species, including *A. xanthophylloides* G. M. Barroso, added after the publication of the revision (Gonçalves & Salviani, 2001). The diagnostic feature for this section is the presence of involute vernation, which is supervolute in the other sections (Croat, 1991). The species of section *Pachyneurium* are usually large herbs with short internodes.

During my first visit to the herbarium Guido Pabst (GJFP) in October 2000, I made note of a specimen of *Anthurium* from Caparaó National Park, originally identified as *A. solitarium* Schott. Its observed morphology consistently varied from the typical *A. solitarium* that usually occurs in the eastern Brazilian states of Minas Gerais, Espírito Santo, and Rio de Janeiro. Later, I observed living plants of this species in the field and have concluded it is a new species, here described. Descriptive terminology follows Croat and Bunting (1979), and the term metaphyll for the second cataphyll follows Grayum (1986).

Anthurium leonii E. G. Gonçalves, sp. nov. TYPE: Brazil. [Minas Gerais:] Alto Caparaó, Parque Nacional do Caparaó, 1300 m, 26 Oct. 1996, *L. S. Leoni 3500* (holotype, GFJP; isotype, UB). Figure 1.

Ad sectionem *Pachyneurium* seriem *Pachyneurium* pertinens. Planta epilithica; internodia brevia, 4–7 cm diam.; prophyllum trigonum, 2-carinatum; metaphyllum lanceolatum non carinatum; petiolus 6–13 cm longus, 0.7–1.5 mm diam., U-formatus, adaxiale sulcatus, marginibus rotundatis; lamina coriacea, obovata, 46–58 cm longa, 21.5–32 cm lata, nervis primariis lateralibus 10–15 utroque, arcuatis; pedunculus 30–46 cm longus, 0.5–0.7 cm diam.; spatha lanceolata vel ovato-lanceolata, 11–17 cm longa, 1.8–2.5 cm lata, marginibus ad basem obtusis sed abrupte acute decurrentibus; spadix castaneus, 9.5–25 cm longus, inferne 7–11 mm diam., sursum attenuatus.

Epilithic; stem with internodes short, 4–7 cm diam.; roots numerous, dense, green, smooth; cataphylls dimorphic, prophyll elongate-triangular, 6–9 cm long, clearly 2-keeled, metaphyll lanceolate, 12–16 cm long, non-keeled, acute at apex, both persisting as long brown fibers. Leaves erect to spreading; petiole 6–13 cm long, 0.7–1.5 cm diam., U-shaped, narrowly sulcate with rounded margins adaxially, rounded abaxially, the surface dark green, pale-speckled; geniculum slightly thicker than the petiole, pale green, 0.5–1.5 cm long; sheath 5.2–9 cm long; blade coriaceous, 46–58 cm long, 21.5–32 cm wide, obovate, rounded at apex with a small mucron up to 2 mm long at apex, obtuse to rounded at base, broadest at the middle or slightly above, the margins very weakly undulate; upper surface matte, medium green, lower surface matte, slightly paler; both surfaces drying matte, yellowish green to yellow-brown; midrib slightly prominent above, obtusely raised below; primary lateral veins 10 to 15 per side, departing midrib at 40°–50° angle, arcuate, slightly raised in

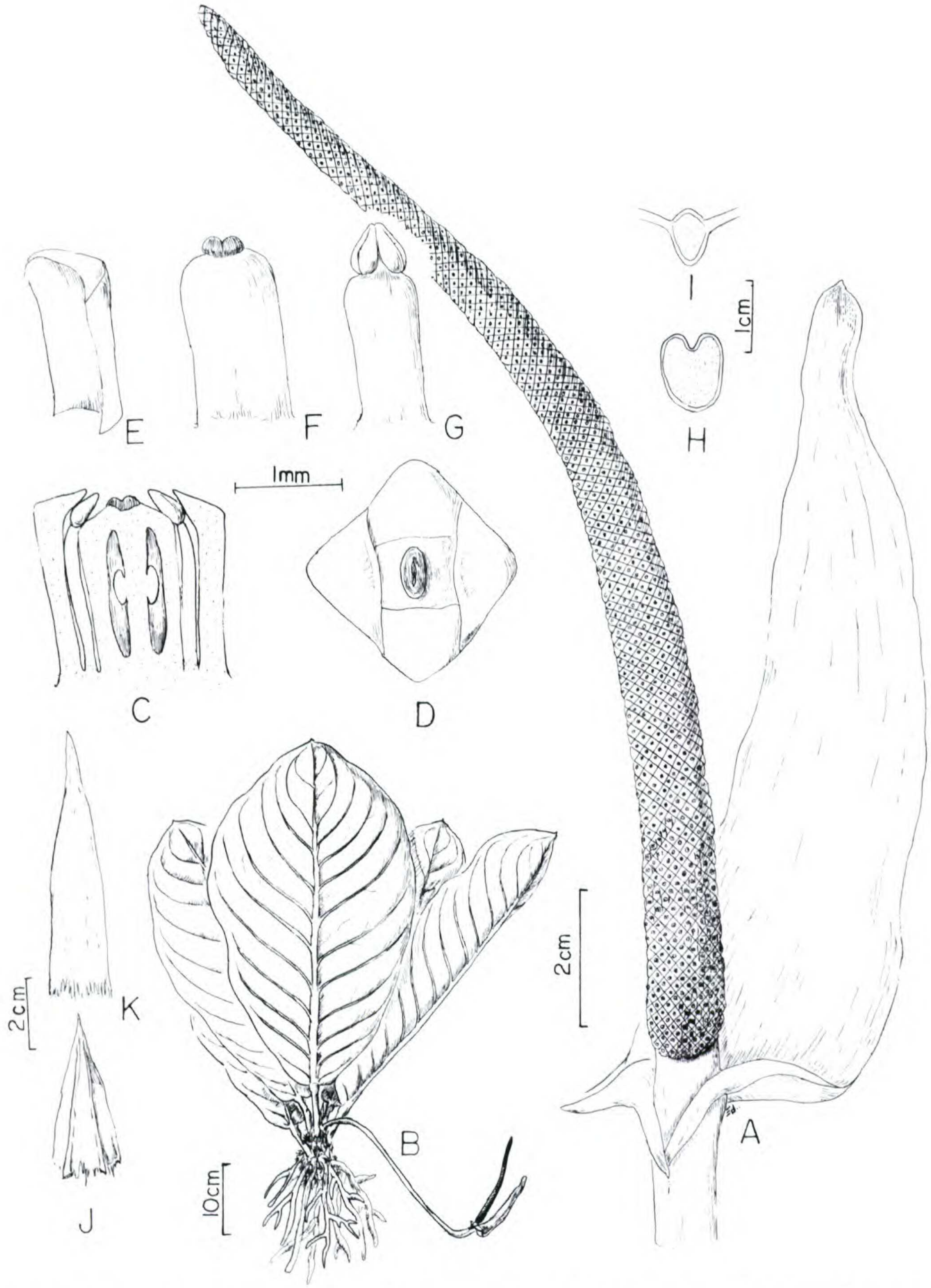

Figure 1. *Anthurium leonii* E. G. Gonçalves. —A. Inflorescence. —B. Habit. —C. Flower, longitudinal section. —D. Flower, view from above. —E. Tepal, side view. —F. Pistil, side view. —G. Stamen. —H. Petiole, cross section. —I. Midrib, cross section. —J. Prophyll. —K. Metaphyll. Drawn from the paratype, *Gonçalves et al. 725*, by the author.

grooves on upper surface, raised below; interprimary veins poorly developed or absent; tertiary veins obscure to slightly sunken above in living material, prominulous in dried leaves, obscure to slightly raised below in living material, prominulous in dried leaves; reticulate veins prominulous when dried; collective vein appearing near the apex or absent. Inflorescences usually pendent, usually shorter than the leaves; peduncle 30–46 cm long, 0.5–0.7 cm diam., 2.3 to 3.6 times longer than the petiole; spathe spreading, coriaceous, lanceolate to lanceolate-ovate, rarely lanceolate-elliptic, purplish tinged with maroon, 11–17 cm long, 1.8–2.5 cm wide, broadest slightly above the base, sometimes almost at middle, inserted at 45°–50° angle on the peduncle, acuminate at apex, obtuse at base, spathe margins almost meeting obtusely then shortly and acutely decurrent to the peduncle; spadix brown, stipitate by ca. 4 mm, tapered, slightly curved, 9.5–25 cm long, 7–11 mm diam. at base, 3–4 mm diam. at apex, broadest near base; flowers rhomboidal, 1.1–2 mm long, 0.8–2 mm wide; 9 to 13 flowers visible in principal spiral, 7 to 10 flowers visible in alternate spiral; tepals matte; lateral tepals 0.6–1 mm wide, the inner margins convex, the outer margins 2-sided; pistils not emergent; stigma ellipsoid; stamens obscuring the pistil; filaments not exserted; anthers 0.4–0.5 × 0.3–0.8 mm; thecae elliptic to ovoid, 0.4–0.5 × 0.2–0.5 mm. Infructescence unknown.

Anthurium leonii is very similar to *A. solitarium*, but differs in having a proportionally broader blade with the length × width ratio about 1.8–2.3 as compared to 2.8–4.8 in *A. solitarium*. *Anthurium leonii* usually has a higher number of primary lateral nerves (10 to 16, rather than usually 8 to 9(to 10) in *A. solitarium*), and these nerves are completely arcuate, whereas they are usually found "running straight from the midrib to the margin, and then steeply and arching rising along the margin" in *A. solitarium* (Croat, 1991: 729). Another important difference is that the spathe margins meet obtusely then are shortly and acutely decurrent onto the peduncle in *A. leonii*, whereas the spathe margins are uniformly and acutely decurrent in *A. solitarium*. *Anthurium solitarium* is known to occur in eastern Minas Gerais State and has been collected in the vicinity of the Caparaó National Park (e.g., *Leoni 2266* and *2260*), usually at elevations up to 600 m. Because of the proportionally broad leaf blade and long pendent inflorescences, no other species in section *Pachyneurium* may be confused with *A. leonii*.

Anthurium leonii belongs to section *Pachyneurium* series *Pachyneurium* because of the involute vernation, as defined by Croat (1991).

Anthurium leonii is epilithic in gneissic outcrops, usually growing together with *Philodendron edmundoi* G. M. Barroso. The plants usually grow in direct sunlight, but some individuals are also found in half-shade. Despite the fact that it is locally abundant, *A. leonii* is known only from the type locality. It is possible that it also occurs in neighboring areas, above 1000 m.

The epithet was chosen in honor of Lúcio S. Leoni, curator of the herbarium GFJP, one of the most important plant collectors of the Caparaó National Park and surrounding areas.

Paratype. BRAZIL. **Minas Gerais:** Alto Caparaó, Parque Nacional do Caparaó, Vale Verde, 1100 m s. m., 1 Feb. 2001, *E. G. Gonçalves, E. R. Salviani, L. S. Leoni & M. Peixoto 725* (GFJP, MO, UB).

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